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Before The FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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In the Matter of)
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Amendment of Parts 2 and 25 of the	ET Docket No. 98-106 (1) RM-9417
Commission's Rules to Permit Operation) RM-9417
of NGSO and FSS Systems Co-Frequency) RM-9245
with GSO and Terrestrial Systems in the Ku-	RECEIVED
Band Frequency Range; and) CEIVER
	APP.
Amendment of the Commission's Rules to	APR 1 4 1999
Authorize Subsidiary Terrestrial Use of the	and the same of th
12.2-12.7 GHz Band by Direct Broadcast) THE SECRETARY
Satellite Licenses and Their Affiliates)

To: The Commission

REPLY COMMENTS OF PETROLEUM COMMUNICATIONS, INC.

Petroleum Communications, Inc. ("PetroCom"), by its attorneys, hereby submits the following reply comments in the above captioned proceeding.¹

1. Most of the commenters including Skybridge L.L.C. ("Skybridge") agree that the equivalent power flux-density ("epfd") and the aggregate power flux-density limits adopted at WRC-97 and proposed in the Commission's <u>NPRM</u> are inadequate to protect incumbent geostationary orbit ("GSO") fixed satellite service ("FSS") operations in the Ku-band.² Further, the commenters

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¹ FCC 98-310 (rel. Nov. 24, 1998).

² Home Box Office and Turner Broadcasting System, Inc. ("HBO") Comments at 2; Denali Telecom L.L.C. Comments at 9; Satellite Coalition Comments at 2; SBC Communications, Inc. ("SBC") Comments at 3-5; Global VSAT Forum Comments at 2-4; GE American Communications, Inc. ("GE Americom") Comments at 19; Virtual Geosatellite, L.L.C. Comments at 10; Echostar Communications Corp. ("Echostar") Comments at 3-5; Sullivan Telecommunications Associates Comments at 3-6; Qualcomm Inc. Comments at 2-3; Telesat Canada Comments at 4-6; Direct TV Inc. Comments at 2-3; Panamsat Corp. Comments at 4-8; Boeing Co. ("Boeing") Comments at 10; Hughes Communications Inc. Comments at 2, 4; Loral

highlight that interference protection criteria are still being analyzed by the International Telecommunications Union ("ITU") working group, JTG 4-9-11. PetroCom agrees with other commenters that the Commission should refrain from going forward until the proposed studies are complete and a consensus on revisions to the provisional limits is reached at WRC-2000.³ With vital communications to energy companies operating in the Gulf at stake, the Commission should delay spectrum sharing for non-geostationary orbit ("NGSO") FSS systems in the heavily congested Kuband, especially in the Gulf, until adequate protection criteria for terrestrial and GSO FSS systems are determined.

2. Generally, the commenters do not oppose the Commission's proposal to establish exclusion areas for siting of gateway stations around the 50 most populated cities to protect the opportunity for relocation of fixed operations from the 2 GHz frequency band to the 10.7-11.7 GHz band. SBC and the FCWC even argue that the Commission expand these exclusion areas.⁴ However, Boeing and Skybridge oppose the siting restrictions as proposed, because they will be unduly burdensome to NGSO FSS licensees and do not correspond to actual concentrations of fixed links that depend on "terrain, transportation and pipeline rights of way, and installation of industrial and commercial facilities." Corresponding exclusion areas to areas of actual concentrations of fixed

Space & Communications Ltd. ("Loral") Comments at 1-4; Fixed Communications Wireless Coalition ("FCWC") Comments at 11-22; Telecommunications Industry Association Comments at 5; Skybridge L.L.C. Comments at 24-36; Northpoint Technology, Ltd. Comments at 31.

³ HBO Comments at 2; SBC Comments at 4; Global VSAT Forum Comments at 2-4; GE Americom Comments at 20; Echostar Comments at 6-7; Qualcomm Inc. Comments at 2-3; Telesat Canada Comments at 4-6; Loral Comments at 2-3, 11.

⁴ SBC Comments at 5; FCWC Comments at 7-8.

⁵ Skybridge Comments at 73; Boeing Comments at 30-32.

links is the reason why PetroCom proposes that the Commission designate the entire Gulf of Mexico as an exclusion area for siting gateway earth stations.⁶ In addition, Boeing's arguments of increased costs to NGSO FSS licensees to access the public switched telephone network and fiber network connections do not apply in the Gulf, because such facilities are located on land and access will not be affected by designating the Gulf as an exclusion area.⁷

- 3. The Gulf's population consists of primarily two classes: (1) energy companies involved in exploration drilling, construction, production, pipelines and so forth; and (2) non-energy related users involved in various marine activities, including fishing boats, government agencies and shipping or pleasure traffic. Due to the unique topography of the Gulf, wireline communications are either not feasible or not cost efficient. Telecommunications users and operators are thus almost exclusively dependent on fixed and mobile wireless systems. Wireless facilities also have a limited number of locations available for siting due to the dependence on oil and gas platforms that are prone to relocation.⁸
- 4. There are numerous fixed links in the Gulf due to the unique topography of the area. The Commission has designated the Gulf as a private microwave congested area due to the vast number of licensed links, many of which may be subject to relocation. The Gulf should therefore be designated as an exclusion area for the siting of gateway earth stations. This will protect the

⁶ PetroCom Comments at 3-4.

⁷ Boeing Comments at 31.

⁸ Petroleum Comm., Inc. v. FCC, 22 F.3d 1164, 1168 (D.C. Cir. 1994).

⁹ Public Notice, "Private Microwave Congested Areas" (rel. June 22, 1983).

opportunity for relocation of fixed operations from the 2 GHz frequency band to the 10.7-11.7 GHz band.

5. For reasons stated above, the Commission should not at this time authorize NGSO FSS operations on a co-primary basis with GSO FSS operations in the Ku-band.

Respectfully submitted,

PETROLEUM COMMUNICATIONS, INC.

By:

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April 14, 1999

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CERTIFICATE OF SERVICE

I, Katrina Blackwell, an employee of Myers Keller Communications Law Group, hereby certify that on this 14th day of April, 1999, I caused to be delivered by hand delivery or first class mail a copy of the forgoing REPLY COMMENTS OF PETROLEUM COMMUNICATIONS, INC. to the following:

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